The Evolution of Foreshock Magnetosonic Waves: ISEE-3 Downstream Observations

J. S. Mok, B. '1'. Tsurutani, J. Arballo, C. M. Ho, (All at: Jet Propulsion 1 aboratory, California Institute of Technology, Pasa(icna>CA91109; 81 8-354-7894)

During the geotail phase of ISEE-3, a number of lunar gravitational assists placed ISEE in orbits which transversed the re gion downstream of the foreshock. Magnetosonic waves detected in this downstream region arc highly time evolved. Previous analyses of both cometary waves and of computer simulations, indicate that the LF waves broaden spatially with time, such that for a wave train consisting of many wave cycles, the individual waves will collide with each other. We investigate this wave-wave process and discuss the results in light of the development of plasma turbulence.

1. WPG Meeting
2. 010102343
3. a) C. M. Ho
   Jet Propulsion Laboratory
   MS 169-506
   4800 Oak Grove Drive
   Pasadena, CA 91109

   b) Tel. 818354-7894
   c) Fax 818354-8895
4. SPA/SM
5. a)

   5 b)
6. Oral
7. 0%
8. $50 check endorsed
9. C
10. Oral preferred